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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/940,850	08/29/2001	Isao Utsumi	SAT 166	5012

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WASHINGTON, DC 20005

EXAMINER
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TRUONG, CAMQUY

ART UNIT	PAPER NUMBER
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2127

DATE MAILED: 10/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/940,850	<b>Applicant(s)</b> UTSUMI, ISAO	
	<b>Examiner</b> Camquy Truong	<b>Art Unit</b> 2127	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/29/01</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 1-8 are presented for examination.
2. It is noted that although the present application does contain line numbers in the specification and claims, the line numbers in the claims do not correspond to the preferred format. The preferred format is to number each line of every claim, with each claim beginning with line 1. For ease of reference by both the examiner and Applicant all future correspondence should include the recommended line numbering.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.
4. Claims 1-8 are rejected under 35 U.S.C 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
  - A. The following terms lack proper antecedent basis:
    - i. The highest priority – claims 1, 3-4 and 8;
    - ii. The relevant task program - claims 5-7.
  - B. The claim language in the following claims is not clearly understood:

i. As to claim 1 and 8, it is not clearly understood how the highest order relates to the highest priority.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kieckhafer et al (U.S. 4,805,107).

6. As to claims 1 and 8, Kieckhafer teaches the invention substantially as claimed including: a task program control system (col. 2, lines 34-36) comprising:

A storing which stores information showing the priorities of a plurality of tasks and orders-per-priority (col.2, lines 55-61; col. 89, lines 31-39);

A priority reading which reads out the priority of the task of the highest priority from said storing (col. 3, lines 3-6; col. 45, lines 63-66; col. 47, lines 30-32);

An order reading which reads out order-per-priority data of the priority read out by said priority reading (col.2, lines 60-61; col. 47, lines 19-24 and lines 30-35; col. 89, lines 39-41);

A priority which holds a value of said priority reading circuit (col. 46, lines 14-19; col. 47, lines 4-7 and lines 18-35; col. 89, lines 40-42; col. 90, lines 58-61)

An order which holds a value of the order in the priority read out by said priority reading circuit (col.46, lines 20-26; col. 47, lines 18-47);

An order-per- priority control which sets a value of the highest order in said order-per-priority data read out by said order reading circuit into said order area and, when the value in said order area is read out, sets said read out value so as to become the lowest order at such timing in the case where it is read out next (col.46, lines 62-66; col. 52, line 64-col. 53, line7); and

A task executing unit which reads out the value in said priority area and said order area as an address of a task which is executed next, executes said task, and after the execution, updates the information in said storing circuit on the basis of a value which said task has and shows whether the task it self is continued or stop (col. 47, lines 18-34; col.89, lines 57-62; col. 90, lines 1-8).

7. Kieckhafer does not explicitly teach that the priority value and an ordering value are stored in registers. However, Kieckhafer teaches a priority value and an ordering value are stored in storage area (col. 45, lines 59-62). It would have been obvious to one of ordinary skill in the art at the time the invention was made that Kieckhafer's system in fact provide the register because it provides a storage to

store an allocation entry which contains the allocation of that task for execution more efficiency.

8. As to claim 2, Kieckhafer teaches when the address of an arbitrary task is read out from said priority area and said order area, the information corresponding to said task in said storing circuit is clear (col. 52, lines 32-35).

9. As to claims 3-4, Kieckhafer teaches:

A counter which counts a value of read access from said task executing unit (col. 89, lines 46-49; col. 91, lines 66-67);

A masking which has a predetermined value corresponding to a specific priority and outputs a count value of said counter when the count value exceeds said predetermined value (col. 89, lines 50-56); and

A specific priority reading circuit which, when the count value is outputted from said masking circuit, reads out the priority of the task of the highest priority among the priorities which are equal to and lower than said specific priority from said storing circuit (col. 89, lines 57-62)

10. As to claims 5-7, Kieckhafer teaches:

A program table and data table showing a program address and a data address corresponding to an arbitrary task are prepared (col. 46, lines 39-50; col. 90, lines 33-42); and

When the address of arbitrary task is read out from said priority area and said order area, said task-executing unit executes the relevant task program on the basis of the address in said program table and said data table and the data is accessed (col. 47, lines 18-34).

*Conclusion*

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Camquy Truong whose telephone number is (571) 272-3773. The examiner can normally be reached on 8AM – 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3756.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIP. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIP system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

Camquy Truong

October 14, 2004

  
MENG-AI AN  
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